



[6450-01-P]

DEPARTMENT OF ENERGY

[Case Number 2017-014]

[EERE-2017-BT-WAV-0061]

Notice of Petition for Waiver of Huawei Technologies, Co. Ltd. from the Department of Energy External Power Supplies Test Procedure and Grant of Interim Waiver

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice of petition for waiver, granting of an interim waiver, and request for public comment.

SUMMARY: This notice announces receipt of and publishes a petition for waiver from Huawei Technologies, Co. Ltd. (“Huawei”) seeking an exemption from specified portions of the U.S. Department of Energy’s (“DOE’s”) test procedure for determining external power supply (“EPS”) energy efficiency. The waiver request pertains to adaptive EPSs that support a particular International Electrotechnical Commission standard. Under the existing DOE test procedure, the average active mode efficiency of an adaptive EPS must be tested at both its lowest and highest achievable output voltages. Huawei contends that since its specified products operate above 2 amps current at the lowest achievable output voltages under rare conditions and for only brief periods of time, the suggested alternate testing approach detailed in its waiver petition is needed to measure the active mode efficiency of such products in a representative manner. DOE is granting Huawei an interim waiver from the DOE EPS test procedure for the

specified basic models of EPSs, subject to use of the alternate test procedure as set forth in this document and is soliciting comments, data, and information concerning the petition and the suggested alternate test procedure.

DATES: Written comments and information are requested and will be accepted on or before ***[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]***.

ADDRESSES: Interested persons are encouraged to submit comments using the Federal eRulemaking Portal at *http://www.regulations.gov*. Follow the instructions for submitting comments. Alternatively, interested persons may submit comments, identified by case number “2017-014”, and Docket number “EERE-2017-BT-WAV-0061,” by any of the following methods:

- *Federal eRulemaking Portal:* *http://www.regulations.gov*. Follow the instructions for submitting comments.
- *E-mail:* *Huawei2017WAV0061@ee.doe.gov*. Include the case number [Case No. 2017-014] in the subject line of the message.
- *Postal Mail:* Ms. Lucy deButts, U.S. Department of Energy, Building Technologies Office, Mailstop EE-5B, Petition for Waiver Case No. 2017-014, 1000 Independence Avenue, SW., Washington, DC 20585-0121. If possible, please submit all items on a compact disc (“CD”), in which case it is not necessary to include printed copies.
- *Hand Delivery/Courier:* Appliance and Equipment Standards Program, U.S. Department of Energy, Building Technologies Office, 950 L’Enfant Plaza, SW., 6th Floor,

Washington, DC, 20024. Telephone: (202) 287-1445. If possible, please submit all items on CD, in which case it is not necessary to include printed copies.

No telefacsimilies (faxes) will be accepted. For detailed instructions on submitting comments and additional information on this process, see section V of this document.

Docket: The docket, which includes *Federal Register* notices, comments, and other supporting documents/materials, is available for review at <http://www.regulations.gov>. All documents in the docket are listed in the <http://www.regulations.gov> index. However, some documents listed in the index, such as those containing information that is exempt from public disclosure, may not be publicly available.

The docket web page can be found at <http://www.regulations.gov/docket?D=EERE-2017-BT-WAV-0061>. The docket web page contains simple instruction on how to access all documents, including public comments, in the docket. See section V for information on how to submit comments through <http://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT: Ms. Lucy deButts, U.S. Department of Energy, Building Technologies Office, Mailstop EE-5B, 1000 Independence Avenue, SW., Washington, DC 20585-0121. E-mail: AS_Waiver_Request@ee.doe.gov.

Michael Kido, U.S. Department of Energy, Office of the General Counsel, Mail Stop GC-33, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585-0103. Telephone: (202) 586-8145. E-mail: Michael.Kido@hq.doe.gov.

SUPPLEMENTARY INFORMATION:

I. Background and Authority

The Energy Policy and Conservation Act of 1975 (“EPCA” or “the Act”),¹ Public Law 94-163 (42 U.S.C. 6291–6317, as codified), among other things, authorizes DOE to regulate the energy efficiency of a number of consumer products and industrial equipment. Title III, Part B² of EPCA established the Energy Conservation Program for Consumer Products Other Than Automobiles, a program that includes EPSs, which are the focus of this notice. (42 U.S.C. 6291(36); 42 U.S.C. 6295(u)).

Under EPCA, DOE’s energy conservation program consists essentially of four parts: (1) testing, (2) labeling, (3) Federal energy conservation standards, and (4) certification and enforcement procedures. Relevant provisions of the Act include definitions (42 U.S.C. 6291), energy conservation standards (42 U.S.C. 6295), test procedures (42 U.S.C. 6293), labeling provisions (42 U.S.C. 6294), and the authority to require information and reports from manufacturers (42 U.S.C. 6296).

The Federal testing requirements consist of test procedures that manufacturers of covered products must use as the basis for: (1) certifying to DOE that their products comply with the applicable energy conservation standards adopted pursuant to EPCA (42 U.S.C. 6295(s)), and (2)

¹ All references to EPCA in this document refer to the statute as amended through the EPS Improvement Act of 2017, Public Law 115-115 (January 12, 2018).

² For editorial reasons, upon codification in the U.S. Code, Part B was re-designated Part A.

making representations about the efficiency of those products (42 U.S.C. 6293(c)). Similarly, DOE must use these test procedures to determine whether a product complies with relevant standards promulgated under EPCA. (42 U.S.C. 6295(s))

Under 42 U.S.C. 6293, EPCA sets forth the criteria and procedures DOE is required to follow when prescribing or amending test procedures for covered products. EPCA requires that test procedures prescribed or amended under this section must be reasonably designed to produce test results which reflect the energy efficiency, energy use or estimated annual operating cost of covered products during a representative average use cycle or period of use and requires that test procedures not be unduly burdensome to conduct. (42 U.S.C. 6293(b)(3)) The test procedure for EPSs is contained in Title 10 of the Code of Federal Regulations (“CFR”) Part 430, subpart B, appendix Z, Uniform Test Method for Measuring the Energy Consumption of External Power Supplies.

The regulations set forth in 10 CFR 430.27 provide that upon receipt of a petition, DOE will grant a waiver from the test procedure requirements if DOE determines either that the basic model for which the waiver was requested contains a design characteristic that prevents testing of the basic model according to the prescribed test procedures, or that the prescribed test procedures evaluate the basic model in a manner so unrepresentative of its true energy or water consumption characteristics as to provide materially inaccurate comparative data. 10 CFR 430.27(f)(2). DOE may grant the waiver subject to conditions, including adherence to alternate test procedures. *Id.*

As soon as practicable after the granting of any waiver, DOE will publish in the *Federal Register* a notice of proposed rulemaking to amend its regulations so as to eliminate any need for the continuation of such waiver. As soon thereafter as practicable, DOE will publish in the *Federal Register* a final rule. 10 CFR 430.27(l).

The waiver process also allows DOE to grant an interim waiver from test procedure requirements to manufacturers that have petitioned DOE for a waiver of such prescribed test procedures if it appears likely that the petition for waiver will be granted and/or if DOE determines that it would be desirable for public policy reasons to grant immediate relief pending a determination on the petition for waiver. 10 CFR 430.27(e)(2). Within one year of issuance of an interim waiver, DOE will either: (i) publish in the *Federal Register* a determination on the petition for waiver; or (ii) publish in the *Federal Register* a new or amended test procedure that addresses the issues presented in the waiver. 10 CFR 430.27(h)(1). When DOE amends the test procedure to address the issues presented in a waiver, the waiver will automatically terminate on the date on which use of that test procedure is required to demonstrate compliance. 10 CFR 430.27(h)(2).

II. Petition for Waiver of Test Procedure and Petition for Interim Waiver

On December 1, 2017, Huawei filed a petition for waiver from the DOE test procedure for EPSs under 10 CFR 430.27 for several basic models of adaptive EPSs³ that meet the provisions of the International Electrotechnical Commission’s “Universal serial bus interfaces

³ The specific basic models for which the petition applies are EPS basic models HW-200200UPX, HW-200300UPX, HW-200325UPX, and HW-200500UPX. These basic model names were provided by Huawei in its December 1, 2017 petition.

for data and power - Part 1-2: Common components - USB Power Delivery” (“IEC 62680-1-2:2017”) specification.⁴ The IEC specification describes the particular architecture, protocols, power supply behavior, connectors, and cabling necessary for managing power delivery over a universal serial bus (“USB”) connection at power levels of up to 100 watts (“W”). The purpose behind this specification is to help provide a standardized approach for power supply and peripheral developers to ensure backward compatibility while retaining product design and marketing flexibility. See generally, IEC 62680-1-2:2017 (Abstract) (describing the standard’s general provisions and purpose).

In Huawei’s view, applying the DOE test procedure to the adaptive EPSs specified in its petitions would yield results that would be unrepresentative of the active-mode efficiency of those products. The DOE test procedure requires that the average active-mode efficiency for adaptive EPSs be measured by testing the unit twice – once at the highest achievable output voltage (“V”) and once at the lowest. The test procedure requires that active-mode efficiency be measured at four loading conditions relative to the nameplate output current of the EPS. See 10 CFR 430.23(bb) and 10 CFR Part 430, subpart B, appendix Z. The lowest achievable output voltage supported by the IEC 62680-1-2:2017 specification is 5V and the nameplate current at this voltage output is 3 amps (“A”), resulting in a power output of 15 W. Huawei contends that while the IEC 62680-1-2:2017 specification requires the tested EPS to support this power output, the 15W at 5V condition will be rarely used and only for brief periods of time, and that adaptive EPSs operating at 5V do not exceed 10W for almost all usage conditions.

⁴ International Electrotechnical Commission Universal serial bus interfaces for data and power - Part 1-2: Common components - USB Power Delivery specification, <https://webstore.iec.ch/publication/26174/>

Huawei contends that, when charging a product that is sold or intended to be used with the EPS, the EPS charges at 5 volts only with a dead battery or fully charged battery (and then at 0.5A or less). At other times when more power is needed, the EPS will use a higher voltage rail (greater than 5V). (A “voltage rail” refers to a single voltage provided by the relevant power supply unit through a dedicated circuit/wire used for that voltage.) Huawei further states that when using an adaptive EPS that supports the IEC 62680-1-2:2017 specification to charge an end-use product of a manufacturer different from the one who manufactured the EPS, it is likely that the product would charge at less than 10W at 5V, or may even be capable of exploiting the ability of an adaptive EPS to provide higher voltages for faster charging.

Accordingly, Huawei asserts that the DOE test procedure’s measurement of efficiency at the prescribed power level (i.e., 5V, 3A) is unrepresentative of the true energy consumption of these EPSs. Consequently, it seeks a waiver from DOE to permit it to use an alternate test procedure to measure the energy efficiency of the specified adaptive EPSs that support the IEC 62680-1-2:2017 specification by testing these devices at the lowest voltage, 5V, and at an output power at 10W instead of 15W.

Huawei also requests an interim waiver from the existing DOE test procedure. DOE will grant an interim waiver if it appears likely that the petition for waiver will be granted, and/or if DOE determines that it would be desirable for public policy reasons to grant immediate relief pending a determination of the petition for waiver. See 10 CFR 430.27(e)(2).

DOE understands that, absent an interim waiver, applying the current DOE test procedure to the specified adaptive EPS basic models would not produce results representative of the actual field usage of these products. DOE notes that it has recently granted interim waivers in response to petitions that presented the same issue as in Huawei's petition.⁵ DOE has reviewed the alternate procedure suggested by Huawei. The procedure, which is the same as that specified in the recently granted interim waiver, will allow for the accurate measurement of efficiency of these products, while alleviating the testing problems associated with Huawei's implementation of EPS testing for the basic models specified in its petition. Consequently, it appears likely that Huawei's petition for waiver will be granted. Furthermore, DOE has determined that it is desirable for public policy reasons to grant Huawei immediate relief pending a determination of the petition for waiver.

III. Alternate Test Procedure

EPCA requires that manufacturers use DOE test procedures when making representations about the energy consumption and energy consumption costs of products covered by the statute. (42 U.S.C. 6293(c)) Consistent representations are important for manufacturers to use in making representations about the energy efficiency of their products and to demonstrate compliance with applicable DOE energy conservation standards.

⁵ See, Notice of Petition for Waiver of Apple, Inc., Microsoft Corporation, Poin2 Lab, and Hefei Bitland Information Technology Co., Ltd. From the Department of Energy External Power Supplies Test Procedure and Grant of Interim Waiver. 82 FR 23294 (July 24, 2017).

In its petition, Huawei suggested that the basic models listed in the petition be tested according to the DOE EPS test procedure prescribed at 10 CFR part 431, subpart B, appendix Z, except to modify the average active mode efficiency calculations by using the average of four loading conditions representing the same respective percentages of an output current of 2A rather than at its highest nameplate output current – in this case, 3A. Under the current test procedure, when testing an adaptive EPS at the lowest achievable output voltage, the measured average active mode efficiency is equal to the average efficiency when testing the EPS at 100%, 75%, 50%, and 25% of the nameplate output current of the EPS at that voltage. See 10 CFR part 430 subpart B, appendix Z, sections 1.f and 4(a)(i)(E), and Table 1. Thus, for an adaptive EPS with a lowest output voltage of 5V and a nameplate output current of 3A (resulting in a 15W output at 100% of the nameplate output current), the average active mode efficiency at the lowest output voltage would be equal to the average of the efficiencies when testing at 15W, 11.25W, 7.5W, and 3.75W. Under the alternate test procedure suggested by Huawei, the average active mode efficiency would equal the average of the efficiencies when testing at 10W, 7.5W, 5W, and 2.5W. The petitioner suggested taking the results from this alternate approach and comparing them against the DOE efficiency requirements at 10W.

During the period of the interim waiver in this notice, the petitioner must test the specified basic models according to the test procedure as discussed in this section. Pursuant to the test procedure waiver regulations at 10 CFR 430.27 and after considering public comments on the petition, DOE will announce its decision as to an alternate test procedure for the petitioner in a subsequent Decision and Order.

IV. Summary of Grant of Interim Waiver

For the reasons stated above, DOE has informed the petitioner that it is granting the petition for interim waiver from testing for the specified EPS basic models. The substance of the Interim Waiver Order is summarized below.

Huawei is required to use the alternate test procedures set forth in this notice to test and rate the EPS basic models listed in the petition (HW-200200UPX, HW-200300UPX, HW-200325UPX, and HW-200500UPX). Huawei is permitted to make representations about the EPS efficiency of these basic models for compliance, marketing, or other purposes only to the extent that such products have been tested in accordance with the provisions set forth in the alternate test procedure and such representations fairly disclose the results of such testing in accordance with 10 CFR 429.37.

DOE evaluates and grants waivers and interim waivers for only those basic models specifically set out in the petition, not future models that may be manufactured by the petitioner. Huawei may request that DOE extend the scope of a waiver or an interim waiver to include additional basic models employing the same technology as the basic model(s) set forth in the original petition consistent with 10 CFR 430.27(g). In addition, DOE notes that granting of an interim waiver or waiver does not release a petitioner from the certification requirements set forth at 10 CFR part 429. See also 10 CFR 430.27(a) and (i).

Unless otherwise rescinded or modified, the interim waiver shall remain in effect until such time as when DOE amends the test procedure to address the issues presented in the waiver and use of the amended test procedure is required to demonstrate compliance. 10 CFR 430.27(h).

DOE may rescind or modify a waiver or interim waiver at any time upon a determination that the factual basis underlying the petition for waiver or interim waiver is incorrect, or upon a determination that the results from the alternate test procedure are unrepresentative of the basic models' true energy consumption characteristics. See 10 CFR 430.27(k)(1). Likewise, Huawei may request that DOE rescind or modify the interim waiver if Huawei discovers an error in the information provided to DOE as part of its petition, determines that the interim waiver is no longer needed, or for other appropriate reasons. 10 CFR 430.27(k)(2). Furthermore, this interim waiver is conditioned upon the understanding that the statements, representations, and documentary materials provided by Huawei are valid and accurate.

V. Summary and Request for Comments

Through this notice, DOE announces receipt of Huawei's petition for waiver from the DOE test procedure for certain basic models of Huawei's EPSs, and DOE grants Huawei an interim waiver from the test procedure for the EPS basic models listed in Huawei's petition. DOE is publishing Huawei's petition for waiver in its entirety, pursuant to 10 CFR 430.27(b)(1)(iv).⁶ The petition includes a suggested alternate test procedure, as discussed in section III of this notice, to determine the EPS efficiency of Huawei's specified EPSs. DOE may consider including this alternate procedure in a subsequent Decision and Order.

DOE invites all interested parties to submit in writing by [***INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER***], comments and information on all aspects of the petition, including the alternate test procedure. Pursuant to 10 CFR 430.27(d), any person submitting written comments to DOE must also send a copy of such

⁶ Huawei did not claim that any portion of its petition contained confidential business information.

comments to the petitioner. The contact information for the petitioner is Mr. Dennis Amari, Director of Federal & Regulatory Affairs, Huawei Technologies, Co. Ltd., 875 15th Street NW, Suite 825, Washington, DC 20005.

Submitting comments via <http://www.regulations.gov>. The <http://www.regulations.gov> web page will require you to provide your name and contact information. Your contact information will be viewable to DOE Building Technologies staff only. Your contact information will not be publicly viewable except for your first and last names, organization name (if any), and submitter representative name (if any). If your comment is not processed properly because of technical difficulties, DOE will use this information to contact you. If DOE cannot read your comment due to technical difficulties and cannot contact you for clarification, DOE may not be able to consider your comment.

However, your contact information will be publicly viewable if you include it in the comment or in any documents attached to your comment. Any information that you do not want to be publicly viewable should not be included in your comment, nor in any document attached to your comment. Persons viewing comments will see only first and last names, organization names, correspondence containing comments, and any documents submitted with the comments.

Do not submit to <http://www.regulations.gov> information for which disclosure is restricted by statute, such as trade secrets and commercial or financial information (hereinafter referred to as Confidential Business Information (“CBI”)). Comments submitted through <http://www.regulations.gov> cannot be claimed as CBI. Comments received through the website

will waive any CBI claims for the information submitted. For information on submitting CBI, see the Confidential Business Information section.

DOE processes submissions made through <http://www.regulations.gov> before posting. Normally, comments will be posted within a few days of being submitted. However, if large volumes of comments are being processed simultaneously, your comment may not be viewable for up to several weeks. Please keep the comment tracking number that <http://www.regulations.gov> provides after you have successfully uploaded your comment.

Submitting comments via email, hand delivery, or mail. Comments and documents submitted via email, hand delivery, or mail also will be posted to <http://www.regulations.gov>. If you do not want your personal contact information to be publicly viewable, do not include it in your comment or any accompanying documents. Instead, provide your contact information on a cover letter. Include your first and last names, email address, telephone number, and optional mailing address. The cover letter will not be publicly viewable as long as it does not include any comments.

Include contact information each time you submit comments, data, documents, and other information to DOE. If you submit via mail or hand delivery, please provide all items on a CD, if feasible. It is not necessary to submit printed copies. No facsimiles (faxes) will be accepted.

Comments, data, and other information submitted to DOE electronically should be provided in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format.

Provide documents that are not secured, written in English and free of any defects or viruses.

Documents should not contain special characters or any form of encryption and, if possible, they should carry the electronic signature of the author.

Campaign form letters. Please submit campaign form letters by the originating organization in batches of between 50 to 500 form letters per PDF or as one form letter with a list of supporters' names compiled into one or more PDFs. This reduces comment processing and posting time.

Confidential Business Information. According to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email, postal mail, or hand delivery two well-marked copies: one copy of the document marked confidential including all the information believed to be confidential, and one copy of the document marked "non-confidential" with the information believed to be confidential deleted. Submit these documents via email or on a CD, if feasible. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include (1) a description of the items, (2) whether and why such items are customarily treated as confidential within the industry, (3) whether the information is generally known by or available from other sources, (4) whether the information has previously been made available to others without obligation concerning its confidentiality, (5) an explanation of the

competitive injury to the submitting person which would result from public disclosure, (6) when such information might lose its confidential character due to the passage of time, and (7) why disclosure of the information would be contrary to the public interest.

It is DOE's policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

Issued in Washington, DC, on March 9, 2018.

Kathleen B. Hogan
Deputy Assistant Secretary for Energy Efficiency
Energy Efficiency and Renewable Energy

**Before the
United States Department of
Energy Washington, DC 20585**

In the Matter of)	
)	
Energy Efficiency Program: Test Procedures for)	Docket No. EERE-2014-BT-TP-0043
External Power Supplies)	RIN 1904-AD36
)	

**Petition of Huawei Technologies Co., Ltd. for Waiver and Application for
Interim Waiver of Test Procedures for External Power Supplies**

Huawei Technologies Co., Ltd. (“Huawei”)¹ respectfully submits this Petition for Waiver and Application for Interim Waiver to the U.S. Department of Energy (“DOE”) on the test procedures prescribed in 10 CFR 430.23, Subpart B, Appendix Z,² for determining the energy efficiency of certain adaptive external power supplies (“EPSs”).³ As set forth herein, Huawei submits that the basic models of the adaptive EPSs identified in Appendix I of this petition satisfy the criteria for a waiver as specified in rules governing DOE’s Energy Conservation Program for Consumer Products.⁴ That is, the prescribed test procedures for evaluating these adaptive EPSs are so unrepresentative of their true energy consumption characteristics that such testing would result in materially inaccurate comparative data. Huawei therefore requests that the alternate test procedure described below serve the purpose of evaluating the energy consumption characteristics of these adaptive EPSs.⁵

Huawei also notes that basic models of adaptive EPSs listed in Appendix I incorporate

¹ Huawei is a leading global provider information and communications technology solutions, products, and services that are used in more than 170 countries and regions - including in the United States— and serve over one-third of the world's population, enabling the future information society and building a Better Connected World. *See* <http://www.huawei.com/en/>.

² *See* 10 CFR 430.23, Subpart B, Appendix Z (2017) (uniform test method for measuring the energy consumption of external power supplies); *see also* 10 CFR 430.27 (2017) (setting forth rules for petition for waiver and interim waiver).

³ As defined in Federal rules, an adaptive EPS is “an external power supply that can alter its output voltage during active-mode based on an established digital communication protocol with the end-use application without any user generated action.” *See* 10 CFR 430.2 (2017).

⁴ *See* 10 CFR 430.27 (a)(1).

⁵ *See* 10 CFR 430.27 (b)(1)(iii).

similar design characteristics to those for which DOE has already granted an interim waiver conditioned on the use of an alternate testing procedure.⁶ Thus, as the prescribed test procedures would result in materially inaccurate comparative data for the basic models of the adaptive EPSs listed in Appendix I and DOE has granted interim waivers for testing of other manufacturers' basic models with similar design characteristics, Huawei requests that DOE grant a waiver for these basic models and provide for the same alternate testing procedures as those approved for other manufacturers.⁷

I. Basic Models of Adaptive EPSs Applicable to this Waiver Petition

The basic models for which a waiver is requested are the adaptive EPSs set forth in Appendix I. All of these basic models are manufactured by Huawei Technologies Co., Ltd. and will be distributed in commerce in the United States under the "Huawei" brand name.

II. Basis for Requested Waiver

As described in the earlier petitions for which DOE granted interim waivers, adaptive EPSs are highly useful consumer products that have beneficial environmental attributes.⁸ For example, they provide energy efficient charging with less resistive loss and accelerate the

⁶ See Notice of Petition for Waiver of Apple, Inc., Microsoft Corporation, Poin2 Lab, and Hefei Bitland information Technology Co., Ltd. From the Department of Energy External Power Supplies Test Procedure and Grant of Interim Waiver, 82 FR 34294 (July 24, 2017). Pursuant to Program rules at 430 CFR 430.27 (j), Huawei submits this petition for waiver and application for interim waiver as it is a manufacturer which does not currently distribute adaptive EPSs in commerce in the United States that employ the particular technology or have the same particular characteristic as those identified in the petitions noted here. Hence, prior to distributing in commerce in the United States the adaptive EPSs identified in Appendix I, Huawei submits this petition for waiver and request for interim waiver of these EPS basic models.

⁷ Huawei notes that DOE has stated it will publish in the *Federal Register* either: a "Decision and Order" as to the continued use of the alternate testing procedure approved as part of the earlier waiver petitions or a modified version thereof; or a new amended testing procedure. 82 FR 34294, 34297 (July 24, 2017). While DOE final action may resolve the issue of testing all basic models of adaptive EPSs under the latter scenario, Huawei requests immediate relief by the grant of an interim waiver and, to the extent necessary, a waiver from the prescribed test procedures.

⁸ See Petition of Apple, Inc. for Waiver and Application for Interim Waiver of Test Procedures for External Power Supplies (June 8, 2017) at 2 ("Apple Petition"); Petition of Microsoft Corporation for Waiver and Application for Interim Waiver of Test Procedures for External Power Supplies (June 8, 2017) at 2 ("Microsoft Petition"); Petition of Poin2Lab for Waiver and Application for Interim Waiver of Test Procedures for External Power Supplies (June 8, 2017) at 2 ("Poin2Lab Petition"); and Petition of Hefei Bitland Technology Co., Ltd. for Waiver Application for Interim Waiver of Test Procedures for External Power Supplies (June 22, 2017) at 2 ("Hefei Petition").

charging process which reduces the overall time needed to charge a product's battery. They can also be readily reused when devices are replaced.⁹ While convenient for consumers, adaptive EPSs further yield environmental benefits by providing more efficient energy use, reduced packaging with less landfill waste and a decreased need for transportation shipments.¹⁰

The current DOE test procedure requires measurement of average active-mode efficiency for adaptive EPSs at four load points – 100%, 75%, 50%, and 25% – for each of the highest and lowest voltage levels.¹¹ The average efficiency is deemed to be the arithmetic mean of the efficiency values calculated at the four load points.¹²

The lowest achievable output voltage supported by the basic models is 5 volts (V), which corresponds to a maximum power of 15W.¹³ According to International Electrotechnical Commission's ("IEC") USB Power Delivery Specification (IEC 62680-1-2:2017), the product shall support 15 W at 5V.¹⁴

Adaptive EPSs are increasingly used with tablets, mobile phones, and similar hand-held devices. These devices constitute the typical primary load of adaptive EPSs. In conformance with the IEC USB Power Delivery Specification, the adaptive EPSs listed in Appendix I are required to support 15W (5V 3A[amps]) when used with these devices.¹⁵ However, these devices very rarely consume the power of 15W and do not exceed 10W in nearly all real-world usage scenarios.

⁹ *See Id.*

¹⁰ *See Id.*

¹¹ *See* § 430.23, Subpart B, Appendix Z, 4(a)(i)(C), (E) and (H); *see also* Apple Petition at 3; Microsoft Petition at 2; Poin2 Lab. Petition at 2; *and* Hefei Petition at 2.

¹² *See* § 430.23, Subpart B, Appendix Z, 4(a)(i)(H).

¹³ *See Id.*; *see also* Apple Petition at 3; Microsoft Petition at 2; Poin2 Lab. Petition at 2-3; *and* Hefei Petition at 2-3.

¹⁴ IEC 62680-1-2:2017, Universal serial bus interfaces for data and power – Part 1-2: Common components – USB Power Delivery Specifications. *See:* <https://webstore.iec.ch/publication/29564>.

¹⁵ *See Id.*

As described to DOE in earlier petitions,¹⁶ evaluation of adaptive EPSs at the 15W power level does not represent actual energy consumption characteristics of the basic models listed in Appendix I because the 15W at 5V power level will only be used in extremely rare instances for very short periods of time. Therefore, Huawei agrees that “evaluation of adaptive EPSs at the 15W power level when evaluating efficiency at the lowest voltage rail (5V) is grossly unrepresentative of the actual energy consumption characteristics of these models in real world usage.”¹⁷ As such, Huawei joins the earlier petitioners’ request that DOE grant a waiver with the alternate test procedure described below.

III. Proposed Alternate Test Procedure

Consistent with the approved alternate test procedure included in the earlier waiver petitions granted by DOE,¹⁸ Huawei requests that the same test procedure be allowed for purposes of evaluating the performance of the basic models of adaptive EPSs listed in Appendix I. Specifically, Huawei requests DOE allow performance testing as follows:

“The applicable method of test for the basic models...is the test procedure for EPSs prescribed by DOE at 10 CFR part 430, subpart B, Appendix Z, except that under section 4(a)(i)(E) and Table 1 of Appendix Z, adaptive EPSs that meet the IEC 62680-1-2:2017 specification must be tested such that the 100% nameplate loading condition when testing at the lowest achievable output voltage is 2A (which corresponds to all output power of 10 watts). The 75%, 50% and 25% loading conditions shall be scaled accordingly and the nameplate output power of such an EPS, at the lowest output voltage, shall be equal to 10 watts.”¹⁹

Huawei recommends that a waiver, if granted, continue until such time as DOE adopts an applicable amended test procedure for adaptive EPSs.

¹⁶ See Apple Petition at 4; Microsoft Petition at 3; Poin2 Lab. Petition at 3; *and* Hefei Petition at 3.

¹⁷ See *Id.*

¹⁸ See 82 FR 34294, 34296 (July 24, 2017).

¹⁹ See *Id.*

IV. Request for Interim Waiver

Huawei also requests that DOE grant an interim waiver for testing and rating of the basic models of adaptive EPSs listed in Appendix I. As DOE stated on the earlier petitions, “absent an interim waiver, the basic models identified... cannot be tested and rated for energy consumption on the basis of their true characteristics.”²⁰ Further, DOE concluded “that [the alternate test procedure] will allow for the accurate measurement of the energy use of these products, while alleviating the testing problems associated with petition’s implementation of EPS testing for their adaptive EPSs that support the IEC 62680-1-2:2017 specification,” and that “the petition for waiver will likely be granted and has decided that it is desirable for public policy reasons to grant petitioners immediate relief pending a determination on the petition for waiver,”²¹

In addition, without waiver relief, Huawei will be subject to requirements that should not apply to these products; that is, compliance with both the IEC 62680-1-2:2017 specification and the current DOE test procedure requirements for these adaptive EPSs, simultaneously, is not possible. Further, Huawei’s ability to distribute its adaptive EPSs in commerce in the United States will be impaired, thereby placing Huawei at a competitive disadvantage in relation to other manufacturers and distributors absent a favorable determination by DOE.²² For all of the reasons outlined above, Huawei likewise requests an interim waiver for the basic models of the adaptive EPSs listed in Appendix I.

V. List of Manufacturers

A list of manufacturers of all other basic models of adaptive ESPs distributed in commerce in the United States and known to Huawei that incorporate design characteristic(s)

²⁰ See 82 FR 34294, 34296 (July 24, 2017).

²¹ See *Id.*

²² See 10 CFR 430.27(B)(2).

similar to those found in the basic models that are the subject of the petition is provided in Appendix II. The list is identical to the list included in the earlier petitions with the addition of the four petitioners.²³

* * *

Huawei requests expedited consideration of this Waiver Petition and Application for Interim Waiver and is willing to promptly provide any additional information DOE believes may be necessary for that purpose.

VI. Conclusion

DOE should grant the requested waiver and interim waiver for the basic models of adaptive EPSs listed in Appendix I.

Respectfully submitted,

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²³ See Apple Petition, Appendix II at 13; Microsoft Petition, Appendix II at 12; Poin2 Lab. Petition, Appendix II at 12; and Hefei Petition, Appendix II at 12.

APPENDIX I

The waiver and interim waiver requested herein should apply to testing and rating of the following basic models:

Model	Product Type	Nameplate Input Rating (AC)	Nameplate Output Rating (DC)
HW-200200UPX	Adaptive Single Voltage External Power Supply	100-240V~, 50-60Hz, 1.2A	Highest output voltage: 20V, 2A (40W) Lowest output voltage: 5V, 3A (15W)
HW-200300UPX	Adaptive Single Voltage External Power Supply	100-240V~, 50-60Hz, 1.8A	Highest output voltage: 20V, 3A (60W) Lowest output voltage: 5V, 3A (15W)
HW-200325UPX	Adaptive Single Voltage External Power Supply	100-240V~, 50-60Hz, 1.8A	Highest output voltage: 20V, 3.25A (65W) Lowest output voltage: 5V, 3A (15W)
HW-200500UPX	Adaptive Single Voltage External Power Supply	100-240V~, 50-60Hz, 2.0A	Highest output voltage: 20V, 5A (100W) Lowest output voltage: 5V, 3A (15W)

APPENDIX II

The following are manufacturers of all other basic models distributed in commerce in the United States and known to Huawei to incorporate design characteristics similar to those found in the basic models that are the subject of the petition for waiver:

Acbel
Active-Semi, Inc.
Apple, Inc.
Bitland
Chicony Power Technology
Chrontel, Inc.
Dell
Honor Electronic Co., Ltd.
Huntkey
Ever Win International Corp.
Griffin Technology LLC
LG Electronics USA, Inc
Liteon
Lucent Trans Electronics Co.,
Ltd.
Microsoft Corporation
Mobileconn Technology Co.,
Ltd. Phihong Technology Co.,
Ltd.
Poin2 Lab
Renesas Electronics Corp.
Salcomp Plc
Samsung
STMicroelectronics
Superior Communications
Texas Instruments
Ventev Mobile
Weltrend Semiconductor
Xentris Wireless

Sources include: “USB Power Brick”, USB Implementers Forum, Inc., <http://www.usb.org/kcompliance/view/CertifiedUSBPowerBricks.pdf>
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